UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/599,731	11/13/2006	Bernd Howe	101769-377 KGB	3333	
	27384 7590 06/22/2009 NORRIS, MCLAUGHLIN & MARCUS, PA			EXAMINER	
875 THIRD AVENUE 18TH FLOOR NEW YORK, NY 10022			BODAWALA, DIMPLE N		
			ART UNIT	PAPER NUMBER	
			1791		
			MAIL DATE	DELIVERY MODE	
			06/22/2009	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)			
	10/599,731	HOWE ET AL.			
Office Action Summary	Examiner	Art Unit			
	DIMPLE N. BODAWALA	1791			
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the c	orrespondence address			
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1. after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period  - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailine earned patent term adjustment. See 37 CFR 1.704(b).	DATE OF THIS COMMUNICATION 136(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from e, cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).			
Status					
<ol> <li>Responsive to communication(s) filed on 15 A</li> <li>This action is FINAL.</li> <li>Since this application is in condition for allowated closed in accordance with the practice under the second seco</li></ol>	s action is non-final. ance except for formal matters, pro				
Disposition of Claims					
4)  Claim(s) 1-11 is/are pending in the application  4a) Of the above claim(s) is/are withdra  5)  Claim(s) is/are allowed.  6)  Claim(s) 1-11 is/are rejected.  7)  Claim(s) is/are objected to.  8)  Claim(s) are subject to restriction and/o  Application Papers  9)  The specification is objected to by the Examine  10)  The drawing(s) filed on is/are: a) accompany and applicant may not request that any objection to the	er.  cepted or b) objected to by the legacing of the drawing(s) be held in abeyance. See	e 37 CFR 1.85(a).			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.					
Priority under 35 U.S.C. § 119					
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
Attachment(s)  1) Notice of References Cited (PTO-892)  2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  3) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate			

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# DETAILED ACTION

#### Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/15/2009 has been entered.

### **Drawings**

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed limitation of claim 4, such as "the backing of the die-cut is provided with an adhesive coating ... on the side opposite from the adhesive" must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the

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applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### Claim Rejections - 35 USC § 112, first paragraph

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

- 4. Claims 1-11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
- 5. Claims 1, 9 and 11 are rejected because claims cite limitation of "non-foamingly unexpanded foam body" is not disclosed in the disclosure of the instant application.

  Instant disclosure suggests "non-foamingly expanded foam body" (See page 2).
- 6. Claim 1 is rejected because claim cites process step of "...the non-foamingly unexpanded foam body only extends outward from the first adhesively treated side of the die cut...", wherein such process step is not disclosed within the instant disclosure.
- 7. Claim 9 is rejected because claim cites limitation of "...wherein the non-foamingly unexpanded foam body is located completely outside of the plane of the die cut...", is not described in the instant disclosure such away. Instant disclosure teaches that "...in particularly centrally, on the adhesively treated side with a non-foamingly expanded foam body,...", Thus, the foam body is located at center of the die cut, not completely outside of the plane of the die cut as cited in claim.

# Claim Rejections - 35 USC § 112, second paragraph

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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9. Claims 1-11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- 10. Claim 1 recites the limitation "the supply of heat" in line 14. There is insufficient antecedent basis for this limitation in the claim.
- 11. Claim 1 is vague and indefinite because it is unclear how the non-foamingly unexpanded foam body only extends outward from the first adhesive treated side of the die cut.
- 12. Claim 6 recites the limitation "the foaming expansion of the die cut" in lines 1-2. There is insufficient antecedent basis for this limitation in the claim, because claim 6 is depended on claim 1, wherein claim 1 cites limitation of heating unexpanded foaming body in such a way that the foam body foamingly expands, but claim 1 does not cite limitation of foaming expansion of the die cut, therefore, such limitation of the claim makes the scope of the subject matter indeterminate.
- 13. Claim 9 recites the limitation "the supply of heat" in line 17. There is insufficient antecedent basis for this limitation in the claim.
- 14. Claim 9 is vague and indefinite because it is unclear about the position of the non-foamingly unexpanded foam body such as completely outside of the plane of the die-cut, in order to fix the hole of the plastic part of automobile body.
- 15. Claim 11 recites the limitation "the supply of heat" in line 10. There is insufficient antecedent basis for this limitation in the claim.

## Claim Objections

16. Claims objected to because of the following informalities: Claim 9 is objected because claim 9 cites typographical error such as "non-fominly" in line 11. Appropriate correction is required.

### Response to Arguments

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- 17. Applicant's arguments filed on 4/15/2009 have been fully considered but they are not persuasive. Applicant argues that in combination rejection of claims over Korchnak et al. (US 2003/0047268) in view of Cydzik et al. (US 6,114,004) and/or Smith et al. (US 5,166,007) in view of Cydzik et al. (US 6,114,004), wherein Korchnak et al. and Smith et al. fail to teach or suggest a non-foamingly unexpanded foam body for sealing a hole as cited in claims. In contrast, Cydzik teaches the unfoamed sealing member is always located within the plane defined by the support member and that the unfoamed sealing member extends outwardly in both directions away from the plane defined by the support member. Thus, Korchnak et al.; Smith et al. and Cydzik fail to teach or suggest a step of fixing an at least partly single-sidedly self-adhesively treated die cut having a backing, wherein the non-foamingly unexpanded foam body only extends outward from the first adhesively treated side of the die cut as cited in claim 1; further fail to teach or suggest a step of fixing an at least partly single-sidedly self-adhesively treated die cut having a backing, wherein the non-foamingly unexpanded foam body is located completely outside of the plane of the die cut as cited in claim 9; and also fail to teach or suggest a step of fixing an at least partly single-sidedly self-adhesively treated die cut having a backing, wherein the fixing carried out on the hole in such a way that the hole is completely covered by the die-cut and the unexpanded foam body is only located within the hole as cited in claims. Korchnak et al.; Smith et al. and Cydzik fail to teach or suggest an adhesive comprising at least one elastomer selected from a styrene-isoprenestyrene elastomer and a styrene-butadiene-styrene elastomer as cited in claim 10. 18. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections
- cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The test for obviousness is not whether the features of a secondary reference may be bodily incorporated into the structure of the primary reference; nor is it that the claimed

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invention must be expressly suggested in any one or all of the references. Rather, the test is what the combined teachings of the references would have suggested to those of ordinary skill in the art. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981). In this case, Primary reference Korchnak et al. discloses an invention related to repair crack in the fuel tank, wherein such process is accomplished by providing Figure 1 of Korchnak shows that the die cut has a first adhesively treated side and a second side located opposite to the first side, wherein first adhesively treated side comprises backing layer (11) whose area is greater than the diameter of the crack; an adhesive coating (12), so the backing layer (11) adhered to the surface of the crack of the tank promptly (See abstract), but fails to teach or suggest unexpanded foam body. Furthermore, Smith et al. discloses an invention related to repair metal part with a filler molding wherein such process is accomplished by providing Figure-3 of Smith shows that the die cut having first adhesively treated side and second side, wherein first adhesively treated side comprises backing layer. Figure 3 further shows that the hole of the metal part comprises reinforcing material and/or thickening agent (32) as a filler material, in order to smooth out the hole of the damaged area. However, Smith fails to teach or suggest unexpanded EVA foam body as cited in claim. Thus, lacking of claimed limitation of the primary references would be modify by providing teaching of secondary reference, Cydzik et al. ('004) discloses an invention which is related to seal the cavity of a vehicle, wherein invention comprises sealing material such as EVA (See col. 10 lines 4-7 in the section of "Sealing member)) is disposed within the cavity and heated by other heat source, so the sealing member may be foamed and conform the shape of the cavity (See col.15 lines 35-63), wherein thickness of the sealing member is desirably between 3 and 8 mm (See col.13 lines 15-36). Thus, the position of the sealing material of Cydzik is related to the configuration of plane of the die cute, in order to maintain the position of the material within the hole during the unexpansion process, wherein sealing material is able to expand outward from the first adhesively treated side of the die cut to repair or to seal the

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hole of the article, and, thus, able to exhibit the repaired article with smooth and excellent appearance. Furthermore, extending position of unfoamed sealing member is depended on the configuration of the plane of the die-cut, here, the secondary art having flat configuration of the support member, therefore unfoamed body extends outwardly in both directions away from the plane defined by the support member. It is not necessary that the prior art suggests expressly or in so many words the changes or possible improvements the inventor made but that the knowledge is clearly present. *In re Sernaker, 217 USPQ 1 (Fed. Cir. 1983).* Therefore, rejections of claims have been maintained. Applicant's arguments for the limitation of "step of fixing an at least partly single-sidedly self-adhesively treated die cut having a backing, wherein the nonfoamingly unexpanded foam body is located completely outside of the plane of the die cut as cited in claim 9" is moot in view of rejection of claims under section 112, first paragraph.

## Claim Rejections - 35 USC § 103

- 19. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
- 20. Claims 1-3, 6-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Korchnak et al. (US 2003/0047268) in view of Cydzik et al. (US 6,114,004).
- 21. Korchnak et al. discloses a method for fixing a crack in the tank, which comprises crack (13) or hole or die-cut having a first adhesively treated side and a second side defining a plane of the die cut and located opposite to the first adhesively treated side of the die cut (13) (See figure 1), wherein the first adhesively treated side comprising a backing layer or patch (11) whose area is greater than the area of hole or crack (13), wherein backing layer is provided in particular centrally on the repairing side of the crack, wherein fixing being carried out on the crack in such a way that the crack it completely covered by the die-cut (See figure 1a, paragraph # 5, 62). It further teaches

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that the patch (11) or backing layer is made of woven or non-woven fabric or a composite material such as fiber composite (See paragraph # 10, 22), which inherently suggests that the backing layer comprises in particular textile material. It further teaches that the die cut (13) has an adhesive coating (12) over its full area beneath the crack, wherein adhesive coating is selected of acrylic coating on the opposite side from the adhesive (See paragraphs # 55-58).

- 22. Korchnak et al. discloses all claimed structural limitations as discussed above, but fails to teach or suggest EVA foam body for sealing crack.
- 23. Cydzik et al. ('004) discloses an invention which is related to seal the cavity of a vehicle, wherein invention comprises sealing material such as EVA (See col.10 lines 4-7 in the section of "Sealing member)) is disposed within the cavity and heated by other heat source, so the sealing member may be foamed and conform the shape of the cavity (See col.15 lines 35-63), wherein thickness of the sealing member is desirably between 3 and 8 mm (See col.13 lines 15-36). Thus, the position of the sealing material of Cydzik is related to the configuration of plane of the die cute, in order to maintain the position of the material within the hole during the unexpansion process, wherein sealing material is able to expand outward from the first adhesively treated side of the die cut to repair or to seal the hole of the article, and, thus, able to exhibit the repaired article with smooth and excellent appearance, wherein thickness of the sealing member is desirably between 3 and 8 mm (See col.13 lines 15-36).
- 24. As to claim 9, Cydzik et al. ('004) teaches that the sealing member is surrounding and in intimate contact with support member in the plane of the support member (See col.2 lines 50-58). It further teaches that the cavity sealing member within the cavity, wherein the member formed in two portions in spaced-apart relationship (See col.5 lines 56-60; figure 7), wherein figure 7 shows that the sealing member (720) is located completely outside of the plane (710) of the die cut.

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25. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Korchnak et al. by providing EVA foam body of Cydzik et al. because such material having foaming temperature appropriate to the temperature range of intended application, such as a cavity sealing article. To combine two known sealing methods would be obvious to one of ordinary skill in the art, since such would be expected to supplement each other.

- 26. Claims 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Korchnak et al. (US 2003/0047268) in view of Cydzik et al. (US 6,114,004) further in view of Ashcroft et al. (US 3,689,320).
- 27. Korchnak et al. and Cydzik et al. disclose all claimed structural limitations as discussed above. Korchnak et al. further discloses textile backing layer which comprises woven fabrics, but fails to teach or suggest weft count or warp count of woven fabrics.
- 28. Ashcroft et al. discloses an invention which comprises woven cotton fabric mechanical damping material or for decoration, wherein invention comprises woven cotton fabric having 72 wrap count and 60 weft count (See examples 9-11).
- 29. It would have been obvious to one o ordinary skill in the art at the time of Applicant's invention to modify the invention of Korchnak et al. by providing weft count or warp count of woven fabrics because such alignments makes the fabric to be easily compressed in the shape of body and also easily removed from the body, and further provides fabric with adequate absorptive property as suggested by Ashcroft et al. ('320).
- 30. Claims 1-4, 6-9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 5,166,007) in view of Cydzik et al. (US 6,114,004).
- 31. Smith et al. ('007) discloses an invention for repairing composition and structure wherein invention comprises an opening or a die cut having a first adhesively treated side and a second side defining a plane of the die cut and located opposite to the first adhesively treated side of the die cut (See figure 3), wherein the first adhesively treated side comprises a patch (19) as a textile backing layer comprises layers of woven fabric

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(22-24) and bottom layer (25) for the patch to adhere; and adhesive layer (26) which is opposite from the adhesive (25) (See figure 3). It further teaches that the opening comprises reinforcing material and/or thickening agent (31, 32). Figure 3 further teaches that the textile backing layer whose area is greater than the area of the opening to be obturated and which is provided particular centrally, on the adhesively treated side, and fixing being carried out on the hole in such a way that the hole is completely covered by die-cut and resin material is located within the hole. It further discloses light source (33) for curing the patch.

- 32. Smith et al. discloses a patch (19) which comprises multilayer with a composition comprising mixture of polyester, Vinyl, or acrylic ester, monomeric compound, inhibitor and UV sensitizer (See col.4). Thus, the patch of Smith is capable to have acrylic layer, but fails to teach or suggest that acrylic coating on the side opposite from the adhesive (26). Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Smith et al. by providing acrylic coating on the side opposite from the adhesive (26) or acrylic coating as an outer layer of the patch or backing because the properties of the acrylic coating is capable to exhibit the obturating hole with excellent appearance. It is not necessary that the prior art suggests expressly or in so many words the changes or possible improvements the inventor made but that the knowledge is clearly present. *In re Sernaker*, 217 USPQ 1 (Fed. Cir. 1983).
- 33. Smith et al. discloses all claimed structural limitations as discussed above, but fails to teach or suggest EVA foam body.
- 34. Cydzik et al. ('004) discloses an invention which is related to seal the cavity of a vehicle, wherein invention comprises sealing material such as EVA (See col.10 lines 4-7 in the section of "Sealing member)) is disposed within the cavity and heated by other heat source, so the sealing member may be foamed and conform the shape of the cavity (See col.15 lines 35-63), wherein thickness of the sealing member is desirably between 3 and 8 mm (See col.13 lines 15-36). Thus, the position of the sealing material of Cydzik is

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and 8 mm (See col.13 lines 15-36).

related to the configuration of plane of the die cute, in order to maintain the position of the material within the hole during the unexpansion process, wherein sealing material is able to expand outward from the first adhesively treated side of the die cut to repair or to seal the hole of the article, and, thus, able to exhibit the repaired article with smooth and excellent appearance, wherein thickness of the sealing member is desirably between 3

- 35. As to claim 9, Cydzik et al. ('004) teaches that the sealing member is surrounding and in intimate contact with support member in the plane of the support member (See col.2 lines 50-58). It further teaches that the cavity sealing member within the cavity, wherein the member formed in two portions in spaced-apart relationship (See col.5 lines 56-60; figure 7), wherein figure 7 shows that the sealing member (720) is located completely outside of the plane (710) of the die cut.
- 36. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Smith et al. by providing EVA foam body of Cydzik et al. because such material having foaming temperature appropriate to the temperature range of intended application, such as a cavity sealing article for use in automobile industry. To combine two known sealing methods would be obvious to one of ordinary skill in the art, since such would be expected to supplement each other.
- 37. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Smith et al. (US 5,166,007) in view of Cydzik et al. (US 6,114,004) and further in view of Ashcroft et al. (US 3,689,320).
- 38. Smith et al. and Cydzik et al. disclose all claimed structural limitation as discussed above. Smith et al. also teaches that the patch or backing layer comprises layers of woven fabrics, but fails to teach or suggest weft count or warp count of woven fabrics.
- 39. Ashcroft et al. discloses an invention which comprises woven cotton fabric mechanical damping material or for decoration, wherein invention comprises woven cotton fabric having 72 wrap count and 60 weft count (See examples 9-11).

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40. It would have been obvious to one o ordinary skill in the art at the time of Applicant's invention to modify the invention of Smith et al. by providing weft count or warp count of woven fabrics because such alignments makes the fabric to be easily compressed in the shape of body and also easily removed from the body, and further provides fabric with adequate absorptive property as suggested by Ashcroft et al. ('320).

- 41. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over either Korchnak et al. (US 2003/0047268) or Smith et al. (US 5,166,007) in view of Cydzik et al. (US 6,114,004) and further in view of Schmidt (US 2002/0173582).
- 42. The combination rejection of claim over Korchnak et al. and Cydzik et al. or Smith et al. and Cydzik et al. discloses all claimed limitations as discussed above. Korchnak et al. and/or Smith et al. further teaches that the die cut has an adhesive, but fails to teach or suggest adhesive comprising at least one elastomer as cited in claim.
- 43. Schmidt discloses an invention related to prepare joint between first and second elements, wherein invention comprises hot-melt adhesive comprising thermoplastic elastomer are styrene selected from the group consisting of SBS, SIS, etc. (See paragraphs#122; page 11).
- 44. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Korchnak et al. and/or Smith et al. by providing selected thermoplastic elastomer as an adhesive composition as taught by Schmidt because such composition of the adhesive may be tightly joined together the surfaces of two elements by means of a sealing bed provided with a removable adhesive sealant, wherein such property of the adhesive enable to seal the cavity securely, and thus able to exhibit the repaired surface of the article with excellent appearance. The substitution of one known element for another yields predictable results to one of ordinary skill in the art. In this case, the use of thermoplastic elastomer as an adhesive of secondary arts would provide predictable results of sealing members effectively, see *In re Fout*, 675 F.2d 297, 213 USPO 532 (CCPA 1982); In re O'Farrell, 853 F.2d 894, 7

USPQ2d 1673 (fed. Cir.1988); Ruiz v. Chance Co., 357 F.3d 1270, 69 USPQ2d1686 (Fed. Cir. 2004).

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dimple N Bodawala Examiner Art Unit 1791

/D. N. B./ Examiner, Art Unit 1791

/Philip C Tucker/ Supervisory Patent Examiner, Art Unit 1791